

Circular Economy and GHG Emissions: A Pathway to Sustainability in Europe and Beyond

STRATEGIC INTELLIGENCE BRIEFING

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Executive summary



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online

This map illustrates the intricate relationship between greenhouse gas (GHG) emissions and various innovative strategies aimed at fostering sustainable supply chains, digital transformation, and the circular economy, with a specific focus on Europe but also encompassing global perspectives. It highlights how transitioning to a circular economy can significantly mitigate waste—an alarming trend where production-related materials often end up as leftovers. The map underscores the pivotal role that large companies can play in championing circularity by designing products for durability and promoting services over ownership. Furthermore, it emphasizes that recent developments in digital technology, such as blockchain and digital traceability, have the potential to enhance transparency and efficiency across supply chains, ultimately leading to lower emissions and a smaller carbon footprint. Additionally, the evolving landscape of sustainable investing and the opportunity for businesses to derive value from embracing circular methodologies are examined. The map serves as a catalyst for understanding how collective efforts towards regeneration and innovative financing can pave the way for a sustainable future, particularly in the context of climate change, as nations strive to adhere to the goals set by the Paris Agreement.

The key issues shaping and influencing Circular Economy and GHG Emissions: A Pathway to Sustainability in Europe and Beyond are as follows:

Inclusive Education

As the pandemic wanes, now is the time to extend support to students most in need

Blockchain Policy, Regulation and Law

Places that have adopted relatively accommodating stances, like Switzerland, have seen an influx of companies

Universal Adoption of Affordable Digital Services

The private sector can play an integral role in making universal digital inclusion possible

Circular Business Models

Opportunities abound to reimagine consumption with products designed for sharing, durability, and reuse

Gender and Sustainable Development

Sustainable development and women's empowerment go hand in hand

Understanding Climate Risks

Extreme weather, rising sea levels, and food and water scarcity are becoming a reality

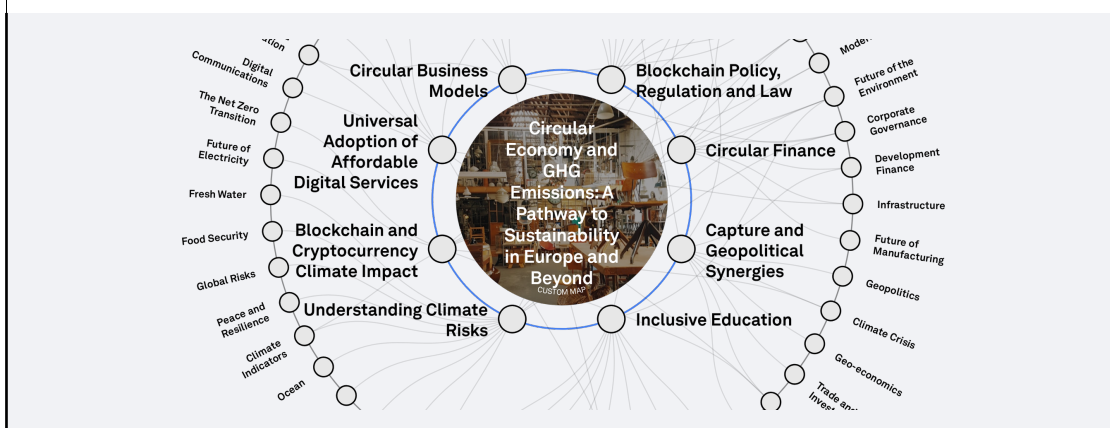
Capture and Geopolitical Synergies

Global cooperation will be key to avoiding unnecessary setbacks for a vital new industry

Circular Finance

Financial firms and other investors need to zero in on environmental, social, and governance considerations

Below is an excerpt from the transformation map for Circular Economy and GHG Emissions: A Pathway to Sustainability in Europe and Beyond, with key issues shown at the centre and related topics around the perimeter. You can find the full map later in this briefing.



In the following sections, we give a comprehensive summary of the latest **Insights and Trends** shaping the

topic, a look at potential **Forecasts and Scenarios** based on current and emerging trends, and an overview of the **Strategic Context**.

1

Insights and trends

A synthesis of the most recent expert analysis.

1.1 Current perspectives



African Center for Economic Transformation

Reforming Technical and Vocational Education in Cote d'Ivoire, Reimagining Opportunities for the Youth

18 August 2025

Côte d'Ivoire is reforming its technical and vocational education and training (TVET) system to address challenges like obsolete curricula and low enrollment (6% of secondary youth), particularly among girls (18%). Key interventions include the Talent Academy, aiming to triple enrollment by 2030, and the Second Chance School, targeting out-of-school youth. A 2022 orientation law enhances governance and coordination. Concerns about the systemic exclusion of youth with disabilities were raised, urging for inclusive policies. Meanwhile, Ghana's National Apprenticeship Program exemplifies successful cross-ministry collaboration, emphasizing on-the-job training in its revamped approach to skills development.



The Conversation (French)

George P. Marsh, pionnier de la protection de l'environnement au XIX^e siècle

15 August 2025

George Perkins Marsh, diplomate et savant américain du XIX^e siècle, est reconnu comme un pionnier de l'écologie et précurseur du concept de durabilité. Son œuvre majeure, "Man and Nature" (1864), examine l'impact destructeur des actions humaines sur l'environnement et souligne l'importance de la gestion des ressources naturelles. Marsh, qui a observé le lien entre la déforestation et la dégradation des sols, a argumenté que les décisions humaines affectent profondément l'avenir écologique. Son héritage reste essentiel dans la réflexion moderne sur

l'environnement et la conservation.

[Try translating with Google](#)



The Conversation (Spanish)

El reto de reducir el desperdicio alimentario en los hospitales

14 August 2025

El desperdicio alimentario en hospitales representa un grave problema envuelto en el impacto ambiental, económico y social. En la UE, se pierden 88 millones de toneladas de alimentos anualmente, con un costo asociado de 143 mil millones de euros. En hospitales, hasta el 35% de la comida servida se desperdicia, variando según el área de atención. Causas incluyen sistemas ineficientes de pedidos y la baja apetencia de los pacientes. Se están implementando estrategias para reducir este desperdicio, como la colaboración con aplicaciones para vender excedentes y personalización de comidas, lo que está demostrando ser efectivo.

[Try translating with Google](#)



Eco-Business

Fossil-fuelled heat has caused tropical birds to decline by 'up to 38%' since 1950s

22 August 2025

Fossil-fuel-driven climate change has led to a decline in tropical bird populations by 25-38% from 1950 to 2020, largely due to increased heat extremes. This study, the first to apply climate attribution techniques to wildlife, reveals that extreme temperatures cause direct mortality and long-term impacts on bird breeding and health. Birds in lower latitudes, particularly in tropical regions, are most affected, emphasizing the importance of addressing climate change to protect these vulnerable species. Existing data challenges highlight geographic biases, with northern regions better represented than the global south.



World Economic Forum

3 investment principles for building long-term resilience

21 August 2025

Foundational shifts in global markets necessitate a fundamental rethinking of investment management. Long-term investment strategies help prevent permanent losses, while diversification, granularity, and agility are critical for building resilient portfolios. Structural shifts, such as rising public debt and demographic changes, alongside foundational shifts like geopolitical instability and technological advancements, are redefining global investing norms. A focus on long-term value by avoiding overpayment and adopting a disciplined investment process is essential. Furthermore, targeted approaches within major themes like AI and climate transition are needed to navigate evolving market landscapes successfully.



Network for Business Sustainability

Table of Contents: July 2025

18 August 2025

NBS's July 2025 compilation highlights recent in-press business sustainability research from top journals, focusing on innovative studies such as the impact of immersive virtual work environments on pro-environmental behavior, labor law spillovers, and social strategies for autistic workers. Additional articles explore the intersections of corporate responsibility with the digital economy, along with diverse topics like eldercare policies, DEI strategies, and the effects of gender diversity on innovation. The compilation serves as a resource for cutting-edge sustainability knowledge in business contexts.



The Conversation

Why Ireland's mild temperatures won't protect it from the climate crisis

22 August 2025

Ireland's mild climate is increasingly threatened by climate change, evidenced by severe storms and rising sea levels. Approximately 40% of the population lives near the coast, making vital infrastructure vulnerable to flooding and storm damage. Awareness of climate change is high, but it hasn't led to significant action; discussions often miss critical points about behavioral change. Building resilience is essential, with policies needed for flood management and sustainable practices. Local initiatives and government commitments aim for a climate-neutral economy by 2050, highlighting the need for collective responsibility in addressing climate challenges.



Eco-Business

Climate change could make 'droughts' for wind power 15% longer, study says

18 August 2025

Extreme "wind droughts" that reduce wind turbine output for extended periods are projected to increase by 15% by the century's end, particularly in the northern hemisphere and mid-latitudes, including the US and Europe. The study in Nature Climate Change highlights documented instances of these events, which may threaten global wind power security but can be mitigated by integrating wind energy with other technologies like solar and hydro. The research serves as a tool for the energy industry to navigate future challenges posed by changing wind patterns due to climate change.



World Economic Forum

Global plastics treaty talks collapse, and other nature and climate news

19 August 2025

Global negotiations to establish a treaty aimed at reducing plastic pollution have collapsed after ten days without consensus on key issues, such as production caps versus waste management strategies. Despite the setback, INC Chair Luis Vayas Valdivieso remains optimistic about future talks. Concurrently, research suggests that biochar derived from human waste could address global fertilizer shortages by supplying up to 7% of the necessary phosphorus and significantly reducing waste volume. Additionally, severe flooding in Pakistan has resulted in over 300 deaths, while Alaska has successfully mitigated flooding risks with temporary barriers.



Asian Development Bank

Household Financial Stability Should Underpin Asia's Path to Prosperity

15 August 2025

Building financial resilience for households in Asia and the Pacific is essential for sustained prosperity. This necessitates a shift from a focus solely on poverty eradication to addressing lifecycle risks, such as mortality, illness, disability, and old-age insecurity. Currently, only a small percentage of the population benefits from pensions, particularly in the informal sector, leading to significant financial vulnerabilities. By 2030, the mortality protection gap is expected to reach \$119 trillion, affecting millions of families. Closing these gaps requires integrating lifecycle risk protection into national strategies alongside disaster risk management, emphasizing the development of pension and insurance markets.



Eco-Business

China's rural communities are adapting to climate change

18 August 2025

Rural communities in China, particularly in Xinshou, Yunnan, are adapting to climate change impacts such as water scarcity and extreme heat. With support from NGOs like Zhaotong Yongqing, villagers have formed committees to manage water resources, reducing conflicts over usage. Workshops educated residents on climate risks, fostering a collaborative spirit to address challenges. Additionally, organizations are shifting focus to include climate adaptation strategies, such as improving agricultural practices and community resilience. The collective understanding of climate issues has strengthened community ties and promoted proactive solutions.



The Conversation

The UK's year of climate U-turns exposes a deeper failure

21 August 2025

The UK government is experiencing significant setbacks in climate policy, approving airport expansions, delaying the phaseout of gas boilers, and reducing green energy levies. The Climate Change Committee (CCC) is criticized for failing to hold the government accountable and for setting net zero targets that do not align with international climate commitments. The CCC's carbon budget allocation disregards equity principles, allowing the UK to emit nearly three times its fair share while burdening vulnerable communities. Additionally, the CCC's reliance on carbon removal technologies over societal transformations underscores a concerning lack of urgency in addressing climate change effectively.



World Economic Forum

How to build a well-being economy for people and planet

19 August 2025

A well-being economy prioritizes quality of life, ecological health, and inclusive prosperity, challenging traditional GDP-focused metrics. It emphasizes human and planetary well-being in economic decisions, aiming for holistic measures of progress. New Zealand's adoption of well-being budgets and a Living Standards Framework serves as a pioneering example. Despite increasing global interest, obstacles such as economic inertia, measurement complexities, and short-termism persist. Transformational pathways include redefining leadership as stewardship, leveraging Asia's cultural values for sustainable practices, and fostering cross-sector collaboration to implement a well-being economy effectively.



The Conversation

How climate change is making Europe's fish move to new waters

20 August 2025

Climate change is significantly impacting fish habitats across Europe, leading to a redistribution of species. Warmer waters and altered food supplies result in predator-prey mismatches, affecting diets, fishing industries, and ocean health. Key commercial species like sardines and mackerel are predicted to shift northward, with sardines potentially thriving while mackerel populations decline. Cold-water species such as cod face tougher futures, with projected significant declines. Fisheries management must adapt to these changes, accounting for the effects of climate change and unsustainable fishing practices to maintain healthy fish stocks.

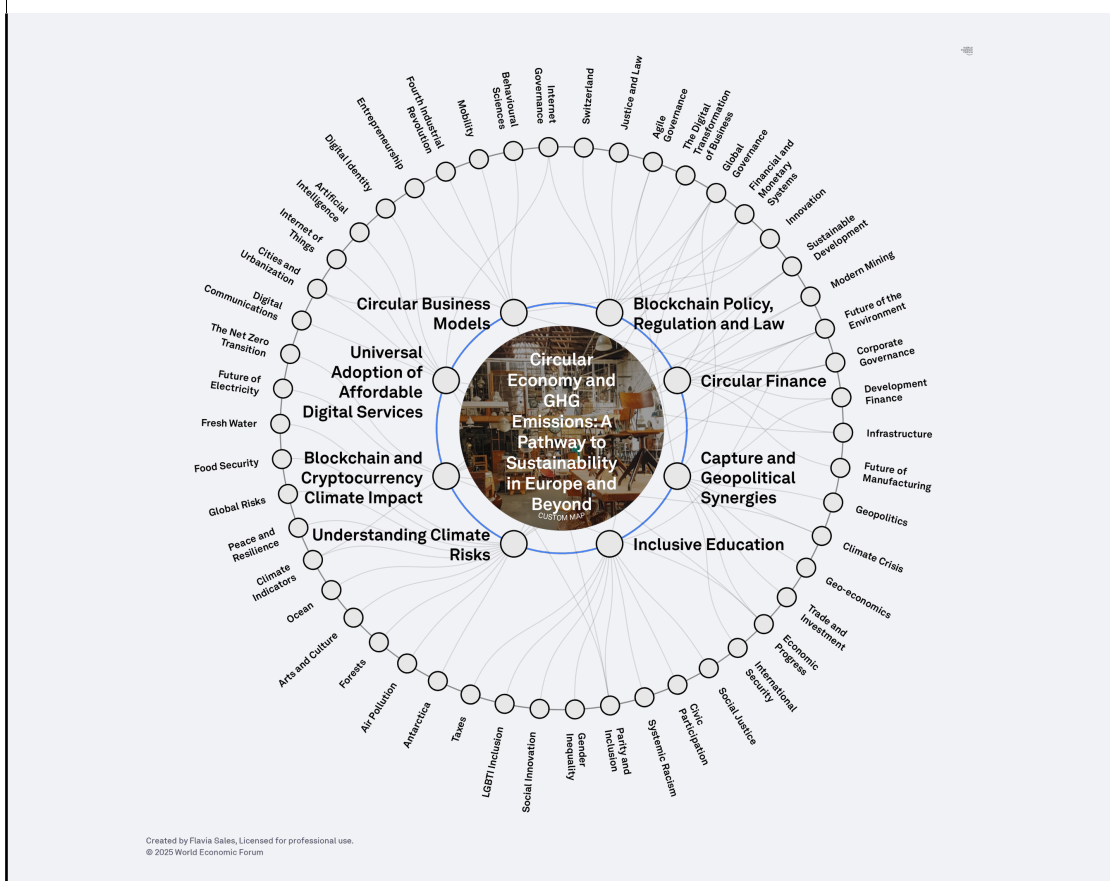
2

Strategic context

The key issues shaping Circular Economy and GHG Emissions: A Pathway to Sustainability in Europe and Beyond.

The following key issues represent the most strategic trends shaping the topic of Circular Economy and GHG Emissions: A Pathway to Sustainability in Europe and Beyond. These key issues are also influenced by the other topics depicted on the outer ring of the transformation map.

FIGURE 1 Transformation map for Circular Economy and GHG Emissions: A Pathway to Sustainability in Europe and Beyond



2.1 Inclusive Education

As the pandemic wanes, now is the time to extend support to students most in need

Access to education is a basic human right and essential for economic growth, yet it remains unattainable for many children in the Global South. Efforts to address this have had mixed results. While there is improvement in terms of enrolment and retention rate at the primary level, completion of a full 12 years of schooling is still a distant dream for many. An estimated 258 million children around the world are not in school; 97 million of them are in sub-Saharan Africa, and another 94 million in central and South Asia (COVID-19 may have sharply increased these figures). These children are largely disadvantaged; many have disabilities, are members of religious minorities, or are migrants. Girls are particularly vulnerable. While the pandemic has made clearer pre-existing fault lines in the public provisioning of education, it also has created opportunities to build stronger, more inclusive and equitable education systems. There is a need to broaden the understanding of what inclusive education means, particularly in countries where related efforts are only being applied to children with disabilities. Governments should carry out vulnerability mappings on at regular intervals.

Reasons vary widely for the lack of access to education - so one-size-fits-all approaches to policy interventions in the sector have largely failed to translate good public-sector intentions into effective outcomes. It is therefore clear that the entire population of out-of-school children cannot be viewed as a single, homogeneous group. To achieve effective outcomes, it will be necessary to implement needs-based, targeted interventions - especially for those children left furthest behind. It is the right time for administrators to try to draw up inclusive fiscal plans looking ahead for the next five years, and to ramp up investment in a manner that more comprehensively addresses the requirements of vulnerable children. As the pandemic wanes, one immediate policy measure that can be implemented is to support more students using both monetary and non-monetary incentives, especially for those in dire need, to keep them in the system. Ultimately, it must be acknowledged that inclusion is not only an outcome but also a process; for truly inclusive education, the participation of many different stakeholders in this process is imperative.

Related topics: [Social Justice](#), [Civic Participation](#), [Systemic Racism](#), [Parity and Inclusion](#), [Gender Inequality](#), [Social Innovation](#), [LGBTI Inclusion](#), [Taxes](#), [Global Governance](#), [Future of the Environment](#)

2.2 Blockchain Policy, Regulation and Law

Places that have adopted relatively accommodating stances, like Switzerland, have seen an influx of companies

The decentralized nature of blockchain technology can easily come into conflict with regulations requiring centralized monitoring, evaluation, and decision-making - especially when it comes to sensitive financial transactions. In recognition of this potential conflict, some countries have been creating regulatory sandboxes that enable experimentation and, potentially, more agile policy-making. For example, the Financial Conduct Authority (FCA) in the United Kingdom launched a regulatory sandbox in 2017 in order to enable more innovative businesses to test their products with real people albeit with safeguards in place. This created an opportunity for the authority to learn about policy and regulatory needs in an experiential, real-time way, and adapt accordingly (other countries including Singapore, South Korea, and India have since emulated this sandbox model). In the 2020 cohort of the FCA Sandbox, six were participants focused on distributed ledger technology (a category that includes blockchain) and digital assets. However, particularly given the borderless and distributed nature of distributed ledger technology, which enables the simultaneous recording of transactions in multiple places, greater international cooperation with such government efforts is called for.

In a repeat of the current situation when it comes to the global regulation of financial and monetary systems, fragmentation has created several barriers for blockchain-focused companies. This can exist even within a single country; many different states across the US, for example, taking varying approaches to regulating the use of the technology. And, beyond the technology itself, blockchain's introduction and enabling of entirely new business models has brought regulators in charge of overseeing a functioning private sector into uncharted territory. Those places that have adopted relatively crypto-friendly stances, such as Switzerland, have attracted an influx of companies - a "Crypto Valley" has formed around the Swiss city Zug, for example, and many consortia including the Libra Association have incorporated as Swiss-based entities. Ultimately, the foundational nature of blockchain technology means that it intersects with an array of industries, like payments and supply chains, each of which has its own intricate set of policies and regulations. It remains to be seen whether these industries will be able to adapt sufficiently to make the best use of the technology.

Related topics: [Internet Governance](#), [Switzerland](#), [Justice and Law](#), [Agile Governance](#), [The Digital Transformation of Business](#), [Global Governance](#), [Financial and Monetary Systems](#), [Innovation](#)

2.3 Universal Adoption of Affordable Digital Services

The private sector can play an integral role in making universal digital inclusion possible

Everyone should be able to afford to participate in the digital economy. In a fragmented world, technology should be seen as a means of connecting and empowering - and not as a tool to drive further exclusion. However, more than a third of the global population remains offline despite 95% of people being within range of some form of connectivity. While specific challenges vary in every country, enabling connectivity generally requires basic infrastructure investment and a focus on affordability and usage gaps in digital services. Despite the progress made in recent years, there is an urgent need for policy-makers to address the widening digital divide and implement mechanisms to encourage cross-sector, public-private dialogue. This can lead to broad value creation through sustainable investment via new financing vehicles, and a combination of new and emerging connectivity solutions to enable full participation in the digital economy.

To derive novel value from emerging technologies, governments are in need of favourable policies and appropriate regulatory standards to drive demand for digital infrastructure, and encourage supply among private sector players. An estimated 70% of new value created in the economy over the next decade will be based on digitally-enabled platform business models; however, 37% of the global population remains unconnected to the internet. Currently, it is estimated that between \$450 billion and \$2 trillion in investment will be needed to achieve universal digital inclusion. Through public-private partnerships, governments can enable the private sector to become more integral to the societies where it operates, by making more comprehensive and affordable access to the digital economy possible.

Priorities for collaboration:

- Develop holistic national digital strategies in collaboration with industry partners.
- Adopt measures addressing the usage gap and affordability in unserved underserved regions.
- Support a combination of existing and emerging technologies to deliver affordable and sustainable connectivity.

Related topics: [Parity and Inclusion](#), [Digital Communications](#), [Cities and Urbanization](#), [Internet Governance](#), [Internet of Things](#), [Infrastructure](#), [Economic Progress](#), [Artificial Intelligence](#), [Digital Identity](#)

2.4 Circular Business Models

Opportunities abound to reimagine consumption with products designed for sharing, durability, and reuse

Much of the material used for production ends up being wasted, and a lot of the value we attempt to create in the process is forfeited. Moving towards a more circular economy entails a radical shift away from this dynamic - and large companies can play a significant role by using their scale to drive circularity into the mainstream. Successful circular economy businesses and initiatives can inspire well-known brands to follow suit, and while models supporting the shift to a circular economy will vary, the key consideration is always whether a business is creating value through extraction and consumption, or through regeneration and restoration. Extending an item's lifespan can be achieved through designing for durability, though in order to truly unlock greater value sustainable design strategies should be deployed in combination with innovation related to maintenance, repair, the standardization of parts, disassembly, refurbishment, and re-manufacturing. Business models that emphasize access over ownership, and selling performance rather than the product itself, will likely be able to keep things in use longer - even as they are used more intensively.

Manufacturers can increase profitability through greater durability, reusability, and energy and water efficiency - and therefore have an incentive to use better-designed products. Customers can also benefit from greater circularity, as paying for a service instead of acquiring an asset means they can enjoy benefits without bearing responsibility for maintenance, repair, and disposal - while accessing products that might have otherwise been out of reach. While cars can be shared among multiple users on peer-to-peer platforms (such as Zipcar or Car2go), power tools can be made available by the hour from local libraries, and clothing can be rented as needed (the New York Public Library lent out professional attire intended use at job interviews in 2018, and the LENA fashion library in Amsterdam operates a membership-based clothing lending service). Ultimately, whereas companies used to only sell cars, they are now selling mobility, and while they once just sold clothes, they can now provide access. By actively rethinking consumption, businesses can be successfully reoriented for the circular economy, and help preserve the value in social and ecological systems.

2.5 Gender and Sustainable Development

Sustainable development and women's empowerment go hand in hand

Women's economic empowerment is key to inclusive economic development and poverty reduction. That fact is recognized explicitly in the United Nations' Sustainable Development Goals - in SDG 5, which calls for achieving gender equality and empowering all women and girls, and in gender-specific benchmarks included in other goals. However, the 2022 SDG Gender Index cited scant progress made on gender equality since the goals were outlined in 2015; more than 25% of the indicators were "far or very far" from 2030 targets. COVID-19 disproportionately impacted women, and even reversed some progress. According to the World Economic Forum's 2022 Gender Gap Report, it will take 132 years to close the global gender gap. While labour inclusion has increased in recent decades, women still make 77 cents for every dollar men earn, according to UN Women. This has several causes, many arising from social norms that push women into some jobs and away from others. There are more men in STEM-related fields that provide higher incomes, for example. In addition, women disproportionately work in the informal economy, and are more liable to take part-time work (due to domestic obligations).

A disproportionate number of women take care work that brings them in and out of labour markets, making it more difficult to attain senior-level positions. This is just one way in which unequal participation contributes to income inequality, and to greater numbers of women retiring into poverty. Understanding what is behind such gaps requires quality data analysed in enough granular detail to measure lived experiences and real needs. It is essential to look beyond averages to empower all women and girls, by accurately tracking their progress. Significant gaps even within different groups of women arise from intersectionality, or the overlapping of different characteristics that create disadvantages - such as ethnicity, race, disability, or class. However, related data is currently insufficient. Governments and international, national, and civil society organizations around the world, alongside the private sector, have increasingly recognized the need to collect and use disaggregated data - and there are now data coalitions, platforms, and portals to compile and make available more and better information. However, as UN Women has emphasized, despite such efforts much data about women and girls remains incomplete or missing - and where it is missing, women and girls are invisible.

Related topics: [The Digital Economy](#), [Financial and Monetary Systems](#), [Parity and Inclusion](#), [Social Justice](#), [Global Health](#), [Gender Inequality](#), [Economic Progress](#), [Inequality](#)

2.6 Understanding Climate Risks

Extreme weather, rising sea levels, and food and water scarcity are becoming a reality

All ten of the hottest years on record have occurred since 2005. The global average temperature is now about 1°C above the pre-industrial average, and increasing at a rate of about 0.2°C per decade. This warming is largely the result of human activity. Carbon dioxide released by burning fossil fuels, and through agricultural activity like farming, has raised the pre-industrial concentration of carbon dioxide in the atmosphere by about one-third to more than 400 parts per million - which has in turn intensified the trapping of heat. Global warming is causing sea levels to rise and is changing precipitation patterns, with increased rainfall in some regions and more extreme drought in others. The world experienced a staggering number of climate-related disasters in 2020 - causing damage from hurricanes, wildfires, droughts, and floods that resulted in financial losses totalling more than \$200 billion, according to the German reinsurer Munich Re. The US National Climate Assessment issued in late 2018 projected yearly related losses of \$300 billion in the US alone by the end of this century.

The Paris Agreement on climate change aims to limit global average temperature rise to well below 2°C above pre-industrial levels. However, a 2018 report published by the Intergovernmental Panel on Climate Change vividly illustrated the need to limit warming to no more than 1.5°C; many ocean ecosystems, including the majority of the world's warm water coral reefs, are likely to disappear if warming exceeds this level. The average global rise in sea level - which is projected to be about half a metre by 2100, if warming reaches 2°C - could be reduced by 20% by hitting the 1.5°C target, thereby protecting an estimated 10 million vulnerable people. A slower temperature rise would also help affected regions better adapt to climate change. In order to meet the 1.5°C target, however, countries must go well beyond their initial Paris Agreement pledges and

commit to net-zero emissions by the year 2050. Achieving this will require far-reaching changes to many aspects of modern society as we know it, but would also help create a more sustainable, equitable world.

Related topics: [Antarctica](#), [Future of the Environment](#), [Air Pollution](#), [Forests](#), [Sustainable Development](#), [Global Governance](#), [Arts and Culture](#), [Ocean](#), [Corporate Governance](#), [Climate Indicators](#), [Peace and Resilience](#), [Global Risks](#), [Food Security](#), [Fresh Water](#)

2.7 Capture and Geopolitical Synergies

Global cooperation will be key to avoiding unnecessary setbacks for a vital new industry

The growing carbon dioxide capture, utilization and storage (CCUS) industry will benefit from international collaboration. On the other hand, a lack of coordination could result in unnecessary setbacks; working together is therefore crucially important when it comes to how CO₂ emissions reduction, avoidance, and removal efforts are accounted for. Much can be learned from experiences with the European Emissions Trading System (EU ETS), which aims to reduce emissions by pricing greenhouse gas pollution, and from the international implications of the Carbon Border Adjustment Mechanism included in the European Union's "Fit for 55" package. Efforts like these can both trigger the substantial transformation of industries, as well as disrupt global supply chains due to their associated impacts on regional (and even global) economies. It is important to note that the availability of necessary resources for carbon dioxide capture, storage and utilization are not distributed according to the need for carbon management - that is, at storage sites, as part of the build-up of capability to utilize raw materials for industrial purposes, as part of energy availability considerations, or as part of space considerations.

Related questions have emerged in terms of how best to set up, manage, and review the essential contributions that CCUS is making to the achievement and maintenance of net-zero carbon economies around the world. Carbon accounting will become a central issue, and calls for a globally-coordinated process capable of accurately assessing and certifying CCUS activity - that is, the entities that are charged with carrying out this work, the use of the next-generation Greenhouse Gas Protocol for the accounting of greenhouse gases, nationally declared contributions towards each countries' reduction of emissions, and their planned adaptations to the impacts of climate change. It is also necessary to consider the specific role CCUS can play in delivering on the outcomes of global climate talks like the COP meetings, in particular in terms of intentions to develop a support system for the developing nations that are most affected by climate change. The development of zero-carbon energy and clean hydrogen, and of CO₂ capture, utilization, and storage may well become opportunities to help build more resilient economies in face of potentially catastrophic climate change.

Related topics: [Geopolitics](#), [Global Governance](#), [Climate Crisis](#), [Agile Governance](#), [Development Finance](#), [Geo-economics](#), [Trade and Investment](#), [Economic Progress](#), [International Security](#)

2.8 Circular Finance

Financial firms and other investors need to zero in on environmental, social, and governance considerations

The financial sector can play a decisive role in mitigating the risks inherent in linear economic models, and in transitioning to a more resilient, circular economy. The industry can choose between a business-as-usual approach, by continuing to finance extractive and highly-polluting industries like oil and mining, or it can help enable the shift to a more regenerative global economy - where waste and environmental damage are proactively limited. This shift is already evident in the form of new environmental rules and regulation, and heightened expectations for sound environmental, social and governance (ESG) principles in the face of a mounting climate crisis. Reputational risk and public pressure can help prompt banks and other investors to make the right decisions, nudge them in the direction of innovative, circular economy-focused businesses, and steer economies in a more constructive direction. Finance will inevitably play a vital role in adopting circular thinking at scale, not least by allocating the necessary capital to boost related projects, fund the necessary research, and build enabling infrastructure in the form of safe and renewable materials and products.

There is clearly a growing amount of interest in environmentally- and socially-responsible investing. As of 2020, sustainable investing assets (those purchased by institutional investors like pension funds that take into account environmental, social, and governance factors) in Europe, the US, Canada, Japan, Australia, and New Zealand totalled \$35.3 trillion, according to the Global Sustainable Investment Alliance - a 15% increase

compared with 2018. Yet, many circular economy investment opportunities remain untapped. The finance sector can encourage and support businesses transitioning to a circular model by providing more related financial solutions and advisory services, and by honing their own understanding of the particular risk and return of circular business models - to help firms reorient strategy accordingly. Directly comparing the performance of traditional businesses with that of circular businesses can obscure the risks inherent in both - as circular models create value in novel ways. Ultimately, a circular economy could generate a wealth of new investment opportunities, and direct trillions of dollars in global capital in search of profit in ways that manage to protect the environment and bolster the social fabric.

Related topics: [Financial and Monetary Systems](#), [Sustainable Development](#), [Modern Mining](#), [Future of the Environment](#), [Corporate Governance](#), [Development Finance](#), [Infrastructure](#), [Future of Manufacturing](#)

References

1. African Center for Economic Transformation, *"Reforming Technical and Vocational Education in Cote d'Ivoire, Reimagining Opportunities for the Youth"*: acetforafrica.org
2. The Conversation (French), *"George P. Marsh, pionnier de la protection de l'environnement au XIX^e siècle"*: theconversation.com
3. The Conversation (Spanish), *"El reto de reducir el desperdicio alimentario en los hospitales"*: theconversation.com
4. Eco-Business, *"Fossil-fuelled heat has caused tropical birds to decline by 'up to 38%' since 1950s"*: www.eco-business.com
5. World Economic Forum, *"3 investment principles for building long-term resilience"*: www.weforum.org
6. Network for Business Sustainability, *"Table of Contents: July 2025"*: nbs.net
7. The Conversation, *"Why Ireland's mild temperatures won't protect it from the climate crisis"*: theconversation.com
8. Eco-Business, *"Climate change could make 'droughts' for wind power 15% longer, study says"*: www.eco-business.com
9. World Economic Forum, *"Global plastics treaty talks collapse, and other nature and climate news"*: www.weforum.org
10. Asian Development Bank, *"Household Financial Stability Should Underpin Asia's Path to Prosperity"*: blogs.adb.org
11. Eco-Business, *"China's rural communities are adapting to climate change"*: www.eco-business.com
12. The Conversation, *"The UK's year of climate U-turns exposes a deeper failure"*: theconversation.com
13. World Economic Forum, *"How to build a well-being economy for people and planet"*: www.weforum.org
14. The Conversation, *"How climate change is making Europe's fish move to new waters"*: theconversation.com

About Strategic Intelligence

Our approach

In today's world, it can be difficult to keep up with the latest trends or to make sense of the countless transformations taking place. How can you decipher the potential impact of rapidly unfolding changes when you're flooded with information - some of it misleading or unreliable? How do you continuously adapt your vision and strategy within a fast-evolving global context? We need new tools to help us make better strategic decisions in an increasingly complex and uncertain environment.

This live briefing on Circular Economy and GHG Emissions: A Pathway to Sustainability in Europe and Beyond, harnesses the World Economic Forum's [Strategic Intelligence](#) platform to bring you the very latest knowledge, data and context from our 300+ high quality knowledge sources. Its aim is to help you understand the global forces at play in relation to Circular Economy and GHG Emissions: A Pathway to Sustainability in Europe and Beyond and make more informed decisions in the future.

Each day, our Strategic Intelligence platform aggregates, distills and synthesizes thousands of articles from around the world. We blend the best of human curation with the power of machine learning to surface high-quality content on over [two hundred global issues](#) to our one million users globally. Our hand-picked network of [content partners](#) from around the world means that we automatically exclude much of the noisy clickbait, fake news, and poor quality content that plague the Internet at large. We work with hundreds of think tanks, universities, research institutions and independent publishers in all major regions of the world to provide a truly global perspective and we are confident that our data are well positioned when it comes to the intrinsic biases inherent to open text analysis on uncensored content from the Internet. For further context on our approach, you may be interested to read [Strategic trend forecasting: anticipating the future with artificial intelligence](#) and [These Are The 3 Ways Knowledge Can Provide Strategic Advantage](#).

↓ A leading expert presenting a transformation map at our Davos Annual Meeting



Overview of methodology

Our [Transformation Maps](#) are dynamic knowledge visualisations. They help users to explore and make sense of the complex and interlinked forces that are transforming economies, industries and global issues. The maps present insights written by experts along with machine-curated content. Together, this allows users to visualise and understand more than 250 topics and the connections and inter-dependencies between them, helping in turn to support more informed decision-making by leaders.

The maps harness the Forum network's collective intelligence as well as the knowledge and insights generated through our activities, communities and events. And because the Transformation Maps are interlinked, they provide a single place for users to understand each topic from multiple perspectives. Each of the maps has a feed with the latest research and analysis drawn from leading research institutions and media outlets around the world.

At the centre of each map is the topic itself. This is surrounded by its "key issues", the forces which are driving transformation in relation to the topic. Surrounding the key issues are the related topics which are also affected by them. By surfacing these connections, the map facilitates exploration of the topic and the landscape within which it sits.

The framework extends beyond mapping current trends by incorporating forecasts and scenarios to project potential future states of the system. Forecasts are based on observable patterns, while scenarios explore broader possibilities, including low-probability but high-impact events. These elements contextualize key issues and related topics within potential future trajectories, enhancing strategic thinking and decision-making.

Harnessing collective intelligence from the Forum network and leading research institutions, the maps synthesize diverse insights into a cohesive view. By integrating these insights with the latest research and analysis, the framework provides a comprehensive understanding of how transformations unfold and interrelate, empowering users to navigate the evolving landscape effectively.

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